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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,182	08/21/2003	David Wayne Moore	SVL920030065US1	9082

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EXAMINER

DAYE, CHELCIE L

ART UNIT	PAPER NUMBER
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2161

DATE MAILED: 02/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/646,182

Applicant(s)

MOORE ET AL.

Examiner

Chelcie Daye

Art Unit

2161

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/21/2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is issued in response to Application filed on August 21, 2003
2. Claims 1-30 are pending.
3. The IDS filed on August 21, 2003 has been accepted.

Drawings

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the specification: Fig.5B, item 580. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. **Claims 1,11, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Circenis (US Patent No. 6,026,424) issued on February 15, 2000.**

Regarding Claims 1,11, and 21, Circenis discloses a method of facilitating data flow between a synchronous process and an asynchronous process, comprising:

converting an input asynchronous data flow from the synchronous process into a synchronous data flow (column 6, lines 31-33, Circenis)¹;

processing the synchronous data flow (column 6, lines 35-44, Circenis) by means of a synchronous task (column 6, lines 33-35, Circenis);

converting the processed synchronous data flow into an output asynchronous data flow (column 6, lines 50-56, Circenis)²; and

¹ Examiner Notes: The act of converting corresponds to “switches” and the inputting of information, is executed by the client process (column 4, lines 16-22, Circenis). Also, “synchronous mode” corresponds to synchronous process, while the synchronous data flow, is represented by the steps that the process has to go through (column 6, lines 35-44, Circenis).

² Examiner Notes: The act of converting is represented by, the server contacting the client and informing the client that the task will “continue” asynchronously. Also, once the task has switched to asynchronous mode, it can only be characterized as an output data flow because the timer has stopped and the only way to complete the task is in the last mode represented which would be asynchronous mode. As such, after completion results are returned which corresponds to the output of the data flow (column 7, lines 5-10, Circenis).

feeding the output asynchronous data flow to the asynchronous process
(column 6, lines 60-67, Circenis)³.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 2-9,12-19, and 22-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Circenis (US Patent No. 6,026,424) issued on February 15, 2000, as applied to claims 1,11, and 21 above, in view of Cole (US Patent Publication No. 20020091719) filed on January 9, 2001.**

Regarding Claims 2,12, and 22, Circenis discloses all of the claimed subject matter as stated above. However, Circenis does not explicitly disclose the use of a buffer queue for the input of the asynchronous data flow. On the other hand, Cole discloses the use of a buffer queue ([0040], lines 5-8, Cole) for the input of the asynchronous data flow. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Cole's buffer queue into the Circenis system for the input asynchronous data flow. A skilled

³ Examiner Notes: Feeding corresponds to "freeing", because both represent advancing information through a system.

artisan would have been motivated to combine the two references as stated by Cole in order to permit configurability for optimal memory space usage ([0039], lines 13-15, Cole). Circenis and Cole are analogous art because they are from the same field of endeavor of a system for executing tasks of varying results to avoid tying up the system. As a result, the buffer queues temporarily store data to help compensate for differences in the transfer rate of data. Also, data from a buffer is available more quickly than data from where the buffer retrieved it.

Regarding Claims 3, 13, and 23, the combination of Circenis in view of Cole, disclose a method further comprising dequeuing a plurality of input buffers ([0041], lines 6-8, Cole) from the synchronous buffer queue ([0040], lines 5-8, Cole).

Regarding Claims 4, 14, and 24, the combination of Circenis in view of Cole, disclose a method further comprising enqueueing the processed synchronous data flow on an asynchronous buffer queue ([0041], lines 4-6, Cole).

Regarding Claims 5,15, and 25, the combination of Circenis in view of Cole, disclose a method wherein processing the synchronous data flow comprises sorting the synchronous data flow ([0058], lines 11-16, Cole)⁴.

Regarding Claims 6,16, and 26, the combination of Circenis in view of Cole, disclose a method further comprising enqueueing the sorted synchronous data flow to a plurality of output buffers ([0056], lines 5, Cole)⁵.

Regarding Claims 7,17, and 27, the combination of Circenis in view of Cole, disclose a method further comprising synchronously filling the output buffers with the sorted synchronous data flow ([0046], lines 6-14, Cole)⁶.

Regarding Claims 8,18, and 28, the combination of Circenis in view of Cole, disclose a method wherein the number of the output buffers is limited to a predetermined maximum value⁷ ([0052], lines 2-7, Cole).

Regarding Claims 9,19, and 29, the combination of Circenis in view of Cole, disclose a method further comprising saving the sorted synchronous data flow in the output buffers at a record processor until the output buffers are requested by the asynchronous process (column 6, lines 8-15, Circenis).

⁴ Examiner Notes: The action of sorting corresponds to "enumerated by a handle", which is an array index. Also, Fig.1, item 18 shows a sorting mechanism.

⁵ Examiner Notes: Output corresponds to "returning".

⁶ Examiner Notes: Filling corresponds to "Loading".

9. Claims 10,20, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Circenis (US Patent No. 6,026,424) issued on February 15, 2000, in view of Rose (US Patent No. 6,519,595) filed on March 2, 1999.

Regarding Claims 10,20, and 30, Circenis discloses all of the claimed subject matter as stated above. However, Circenis does not explicitly disclose a method comprising saving the processed the synchronous data flow for an image copy restore task. On the other hand, Rose discloses a method comprising saving the processed the synchronous data flow for an image copy restore task⁸ (column 2, lines 30-35, Rose). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Rose's teachings into the Circenis system. A skilled artisan would have been motivated to do so in order to make an exact reproduction of all or part of the essential data needed. As a result, this ensures a user that a system failure will not conclude with a loss of data.

⁷ Examiner Notes: The predetermined maximum value corresponds to "Queue-Full".


Points of Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chelcie Daye whose telephone number is 571-272-3891. The examiner can normally be reached on M-F, 7:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chelcie Daye
Patent Examiner
Technology Center 2100
February 8, 2006



Sana Al-Hashemi

⁸ Examiner Notes: The image copy restore task corresponds to a "battery backup SRAM".